DOCUMENT RESUME

ED 395 229 CG 026 960

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TITLE Attachment and Social Problem Solving in Juvenile Delinquents.
PUB DATE [95]
NOTE 12p.; Poster presented at the Annual Meeting of the American Psychological Association (103rd, New York, NY, August 11-15, 1995).
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adolescents; *Attachment Behavior; *Delinquency; Emotional Development; *Individual Development; *Interpersonal Competence; Moral Development; Parent Child Relationship; Personality Development; *Personality Studies; Personality Theories; Secondary Education; *Social Cognition; Violence; Youth Problems
IDENTIFIERS Attachment Disorders; *Social Problem Solving

ABSTRACT

This study investigates characteristics of juvenile delinquency and youth violence by examining attachment and social problem skills. Attachment theory integrates features of psychoanalytic theory, ethology, and cognitive psychology. Research on adolescent attachment suggests that parents continue to function as a secure base for their teenage children. Researchers examined the relationship between insecure patterns of attachment and specific deficits in social problem-solving as applied to three hypotheses: (1) Insecure attachment is related to increased hostile attributional bias in ambiguous social situations; (2) Insecure attachment is inversely related to competence of solutions generated on a social problem-solving task; and (3) Insecure attachment is related to the expectation of fewer potential negative consequences for responding aggressively. Participants were 100 incarcerated male adolescent offenders, between the ages of 13 and 17. To measure attachment and social problem solving, subjects completed the Adolescent Attachment Questionnaire, and then answered questions on their impressions of hostile intent in a series of videotaped vignettes depicting various social interactions. Results showed a specific link between attachment patterns and social problem solving deficits in delinquent adolescents. In particular, the tendency to attribute hostile intentions to neutral or ambiguous social interactions may be partially a product of underlying attachment styles. Three tables present statistical analysis. Contains 23 references. (RJM)

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ABSTRACT. We discuss a model integrating two strands of research on characteristics associated with juvenile delinquency and youth violence: social problem-solving skills and attachment. We describe an ongoing study to test hypotheses based on the model: 1) insecure attachment is related to increased hostile attributional bias in ambiguous social situations; 2) insecure attachment is inversely related to competence of solutions generated on a social problem-solving task; 3) insecure attachment is related to the expectation of fewer potential negative consequences for responding aggressively. Participants are male adolescent offenders incarcerated in the juvenile correctional facilities of Virginia.

BACKGROUND. **Juvenile Delinquency.** Statistics indicate that between 1979 and 1989 the overall number of adolescents in America declined by 11 percent. Over that same time period, the number of youths held in custody *increased* by an alarming 31 percent (Krisberg, DeComo, & Herrera, 1992). The increasing number of adolescents involved in criminal offenses has spurred interest in identifying the origins of such problem behaviors. For years, researchers have examined the impact of family variables on juvenile delinquency. Aspects of family management have been found to relate to adolescent delinquency (Patterson & Stouthamer-Loeber, 1984). Recently, there have been further attempts to clarify the developmental and interpersonal mechanisms by which such experiences can contribute to adolescent involvement in problem behaviors (Allen, Aber, & Leadbeater, 1990).

Attachment. Attachment theory, as conceptualized by John Bowlby (1969) integrates features of psychoanalytic theory, ethology, and cognitive psychology. Bowlby describes attachment behavior as any action performed by the infant with the aim of keeping the caregiver in close proximity. These behaviors are believed to be mediated and controlled by the attachment behavioral system, a biologically based system which has evolved over time to ensure protection of human young from predators and other environmental dangers (Bowlby, 1973; Ainsworth, et al., 1978). In humans, the attachment behavioral system is characterized by both outward behaviors and an inner organization, or "model" of the attachment relationship (Ainsworth, 1989). Early experiences with the caregiver, and internal working models of attachment that are constructed, affect an individual's ability to form other "affectional bonds" and play

a significant role in the quality and nature of these relationships (Bowlby, 1980). Working models help individuals to make sense of others' current behavior, provide them with a framework for anticipating how others' will respond in the future, and assist them in planning their own responses (George & Solomon, 1989). Traditionally, developmental researchers have studied the quality of attachment in infants using the Strange Situation Procedure (Ainsworth, Blehar, Waters, & Wall, 1978). This approach, though useful with infants and pre-verbal children, is not applicable to the study of older individuals. Recent work on attachment relationships beyond early childhood has focused on Bowlby's concept of internal working models.

Studies of adolescent attachment suggest that the parent continues to function as a secure base for their teenage child (Kobak, Cole, Ferenz-Gillies, & Fleming, 1993). Even as adolescents re-negotiate relationships with parents with a goal towards increased independence and autonomy, attachment relationships remain significant. In a review of the literature on adolescent attachment, Rice (1990) notes the increasing attention to attachment beyond the mother-child relationship and to life stages beyond infancy and early childhood. He credits this in large part to the organizational perspective of attachment espoused by Sroufe and Waters (1977). Rice maintains that "the theme derived from the organizational perspective is evident throughout the literature, i.e. that secure attachment relations with parents predict adaptive functioning in a variety of situations for the adolescent" (1990, p. 517). From a developmental perspective, it has been proposed that early interactions with the caregiver provide the basis for what will later become personality. Sroufe (1989) believes that the self, or personality, emerges as the infant moves from a complete dependence on the caregiver for behavioral regulation, to an internalized ability to self-regulate.

Tracing such an argument to later stages of development, one could examine the relationship between an adolescent's quality of attachment, and his or her social and emotional functioning. Allen and colleagues (Allen, Aber, and Leadbeater, 1990) have examined the relationship between adolescent problem behavior and quality of attachment. They propose that the tendency for problem behaviors to co-occur may be indicative of "general patterns of difficulties in social development". The presence of problem behaviors in adolescents might represent an on-going difficulty in mastering the central developmental tasks of adolescence. In keeping with Sroufe's organizational perspective they add that a child who exhibits delinquency during the teen years may have also experienced school problems in preadolescence. Attachment theory has been proposed as one model for understanding the link between family characteristics in childhood, social competence and the later development of problem behaviors (Allen et al, 1990). When parental behaviors are chronically inconsistent or rejecting, the child is almost constantly in a state of uncertainty about the physical or emotional availability of the parent. As a result, he or she experiences frequent and intense anger. Over time, the child in these circumstances learns a model of relationship in which anger and insecurity are central features. Under some conditions, this anger is likely to be displaced onto other sources and result in hostile or anti-social behavior (Allen et al., 1990. p. 458).

Social Problem Solving. The study of social problem-solving has brought together theory from a broad spectrum of fields

including cognitive psychology, social psychology, and social learning theory (Dodge & Crick, 1986). Recently there has been a movement towards understanding psychopathology resulting from the inability to function competently in social situations. Dodge and Murphy (1984) assert that "behavioral maladaptations, including delinquency, addiction, and depression in adolescents may be conceptualized more fruitfully in terms of social competence and social skills". Drawing on research in the areas of cognitive and social psychology, Dodge has developed and applied a social information processing approach to the study of aggression in children and adolescents (Dodge & Crick, 1986). He proposes that effective performance in interpersonal situations is related to five stages of information processing: (1) encoding of cues, (2) interpretation of cues, (3) response search, (4) response decision, and (5) enactment (Dodge & Crick, 1986).

Dodge emphasizes that skill deficits at any of these stages can result in ineffective or maladaptive patterns of problem-solving. For instance, there is considerable evidence that aggressive boys display deficits at the second stage of processing social information and show predictable biases in the interpretation of social cues (Dodge and Crick, 1986). Numerous studies have demonstrated that aggressive children and adolescents tend to attribute hostility to others in ambiguous or neutral social situations (Dodge, 1980; Slaby and Guerra, 1988). In one study, children were provided with a social scenario in which they were to imagine being the recipient of a negative outcome resulting from the actions of another child. Within this context, aggressive children attributed the other child with hostile intent 50% more often than did nonaggressive children (Dodge, 1980). Social problem solving skills and interpersonal negotiation strategies have also been found to relate to self-reported involvement in problem behaviors (Leadbeater, Hellner, Allen, and Aber, 1989). Specifically, significant negative correlations have been found between adolescent males' social problem-solving skills and their engagement in problem behaviors including delinquency, drug use and criminality (Leadbeater et al., 1989).

Attachment and Social Problem Solving. Theorists have emphasized the importance of attachment relationships in the development of an individual's capacity to function adaptively in social interactions (Bowlby, 1973; Hartup, 1989; Sroufe, 1989). Such early relationships are assumed to set the stage for the development of competence in later social interactions through the development of internal working models of attachment and of relationships in general (George & Solomon, 1989). Based on a review of the literature on adolescent attachment, Rice (1990) concluded that "the attachment relationship does seem to consistently and positively correspond to greater reported social competence and more satisfactory interpersonal functioning". As Hartup (1989) notes, "children with secure attachments to their caregiver, as compared with less secure ones, show more appropriate social adaptations as time goes on -- both within and outside these relationships".

PURPOSE OF THE PRESENT STUDY. The present study seeks to clarify the relationship between insecure patterns of attachment and specific deficits in social problem-solving. To date, no empirical study has investigated the relationship between attachment characteristics and social problem-solving in a juvenile delinquent population. We operationalize and test the following hypotheses:

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Insecure attachment is directly related to increased hostile attributional bias in ambiguous social situations.

Insecure attachment is inversely related to competence of solutions generated on a social problem-solving task.

Insecure attachment is directly related to the expectation of fewer potential negative consequences for responding aggressively.

MEASUREMENT STRATEGIES. **Adolescent attachment.** The Adolescent Attachment Questionnaire (AAQ) is a brief self-report instrument designed to assess four attachment characteristics: lack of an internalized secure base, unavailability of the attachment figure, angry distress and role reversal (Sheldon-Keller, West, et al., under review). Each characteristic is measured by five items, with responses scales from 1=completely disagree to 5=completely agree. In studies with adolescents in the community, in psychiatric treatment and in the criminal justice system, the AAQ has demonstrated high validity and reliability. In particular, in a study with adolescents in psychiatric treatment, the AAQ demonstrated high convergent validity with the Adult Attachment Interview (AAI; Main & Goldwyn, 1985/94) (Table 1).

Social Problem Solving. Subjects are shown a series of six videotaped vignettes depicting teenagers engaged in familiar social interactions in ordinary environments such as the classroom, school hallway, gym and basketball court. Each vignette features an ambiguous social interaction between two adolescents. The vignettes and scoring technique are adapted from Dodge and colleagues (1990). Internal consistency for their instrument was found to be acceptable ($\alpha = .64$). In the present study, following the viewing of each vignette, subjects are told to imagine that they are the protagonist in the scene and asked a series of questions to assess:

Hostile attributions: To what extent does he interpret the ambiguous interaction as hostile?

Competence of response: Does his anticipated response indicate low aggression and hostility (high competence) or high aggression and hostility (low competence)?

Anticipation of negative consequences: Can he foresee negative consequences resulting from aggressive or hostile responses?

The responses are recorded in detail by the interviewer. Ratings for hostile attributions, competence of responses and anticipation of negative consequences are assigned subsequently, using a coding manual as a guide. The coding manual was developed by S.M. and L.R., who also conducted all interviews. The inter-rater agreement to date has been very high.

SAMPLE. Approximately 100 male adolescent offenders between the ages of 13 and 17 are participating in this study. These adolescents are recruited from a larger sample of 1,000 adolescent offenders participating in a research study at the Juvenile Correctional Centers of the Commonwealth of Virginia. Adolescents for this study of social problem solving are recruited from two of the Correctional Centers: one with adolescents convicted on generally non-violent and lesser offenses, and one for youth convicted of more serious offenses. African-American and Caucasian youths are well-represented in both the population and the sample (Table 2).

To be eligible for participation, youth must meet the following criteria: parental consent is given; IQ of 80 or higher on both the

Verbal and Performance scales of the WISC-R or WISC-III; no history of severe head injury or epilepsy; and no history of psychosis (excluding episodes related to substance abuse.

PRELIMINARY Findings. Attachment. The adolescents in this sample scored significantly higher on the attachment scales of lack of internalized secure base and role reversal than on the scales of unavailability of attachment figure and angry distress (Figure 1).

Social Problem Solving. The adolescents in this sample scored significantly higher on the competence of solutions scale than on the hostile attributions scale (Figure 2).

Attachment and Social Problem Solving. Preliminary regression analyses indicate that the attachment scales of lack of internalized secure base and role reversal predict a significant percentage of the variance in the hostile attributions score (14%) but not in the competence of solutions score (Table 3). A low score on lack of secure base and a high score on role reversal predict higher scores on hostile attributions.

CONCLUSIONS. Attachment theory and the preliminary results of this study suggest a specific link between attachment patterns and social problem solving deficits in delinquent adolescents. In particular, the tendency to attribute hostile intentions to neutral or ambiguous social interactions may be partially a product of underlying attachment styles. When finalized, these results could provide an empirical basis for further investigations into the developmental sequence, psychodynamic and behavioral correlates and mechanisms of intervention.

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References.

Ainsworth, M.D.S. (1989). Attachments beyond infancy. American Psychologist, 44, 709-716.

Ainsworth, M.D.S., Blehar, M.C., Waters, E., & Wall, S. (1978). Patterns of Attachment: A Psychological Study of the Strange Situation. Hillsdale, NJ: Lawrence Erlbaum Associates

Allen, J.P., Aber, J.L. & Leadbeater, B.J. (1990). Adolescent problem behaviors: The influence of attachment and autonomy. Psychiatric Clinics of North America, 13, 455-467.

Bowlby, J. (1969). Attachment and Loss, Vol I: Attachment. New York: Basic Books.

Bowlby, J. (1973). Attachment and Loss, Vol. II: Separation. New York: Basic Books.

Bowlby, J. (1980). Attachment and Loss, Vol III: Loss. New York: Basic Books.

Dodge, K.A. (1980). Social cognition and children's aggressive behavior. Child Develop., 51, 162-170.

Dodge, K.A. & Crick, N.R. (1986). Social information-processing bases of aggressive behavior in children. Personality and Social Psychology Bulletin, 16, 8-22.

Dodge, K.A., & Murphy, R.R. (1984). the assessment of social competence in adolescents. In P. Karoly & J.J. Stefen (Eds.), Advances in child behavior analysis and therapy, Vol. 3: Adolescent behavior disorders: Foundations and contemporary concerns. Lexington, MA: Heath.

Dodge, K.A., Price, J.M., Bachorowski, J. & Newman, J.P. (1990). Hostile attributional biases in severely aggressive adolescents. Journal of Abnormal Psychology, 99, 385-392.

George, C. & Solomon, J. (1989). Internal working models of caregiving and security of attachment at age six. Infant Mental Health Journal, 10, 222-237.

Hartup, W.W. (1989). Social relationships and their developmental significance. American Psychologist, 44, 120-126.

Kobak, R., Cole, H.E., Ferenz-Gillies, & Fleming, W. (1993). Attachment and emotion regulation during mother-teen problem solving: A control theory analysis. Child Development, 64, 231-245.

Krisberg, B., DeComo, R., & Herrera, N.C. (1992). National juvenile custody trends: 1978 - 1989. San Francisco: National Council on Crime and Delinquency.

Leadbeater, B.J., Hellner, I., Allen, J.D., & Aber, J.L. (1989). Assessment of interpersonal negotiation strategies in youth engaged in problem behaviors. Developmental Psychology, 25, 465-472.

Main, M., & Goldwyn, R. (1985/1994). Adult attachment scoring and classification system. Unpublished manuscript, University of California at Berkeley, Department of Psychology.

Patterson, G.R. & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. Child Development, 55, 1299-1307.

Rice, K.G. (1990). Attachment in adolescence: A narrative and meta-analytic review. Journal of Youth and Adolescence, 19, 511-538.

Sheldon-Keller, A., West, M., Larose, S. & Adam, K. (under review). The assessment of attachment in adolescents.

Slaby, R.G. & Guerra, N.G. (1988). Cognitive mediators of aggression in adolescent offenders: 1. Assessment. Developmental Psychology, 24, 580-588.

Sroufe, L.A. (1989). Relationships, self, and individual adaptation. In A.J. Sameroff & R.N. Emde (Eds.) Relationship Disturbances in Early Childhood. NY: Basic Books.

Sroufe, L.A. & Fleeson (1986). Attachment and the construction of relationships. In W.W. Hartup & Z. Rubin (Eds.) Relationships and Development (pp. 51-72). Hillsdale, NJ: Erlbaum.

Sroufe, L.A. & Waters, E. (1977). Attachment as an organizational construct. Child Development, 48, 1184-1199.

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TABLE 1: CONVERGENT VALIDITY OF THE ADULT ATTACHMENT INTERVIEW & THE ADOLESCENT ATTACHMENT QUESTIONNAIRE

ADULT ATTACHMENT INTERVIEW CLASSIFICATIONS	Adolescent Attachment Questionnaire Scales: Unavailability	Lack of Secure Base	Angry Distress	Role Reversal
UNRESOLVED/DISORGANIZED:				
- Yes (n=64) mean (s.d.)	13.45 (6.08)	12.42 (4.91)	13.22 (4.61)	14.55 (4.94)
- No (n=68) mean (s.d.)	10.47 (4.63)	12.24 (4.0)	11.60 (4.14)	16.62 (3.69)
- F(1,130), p	**10.11, .002**	.06, .81	4.50, .04	**7.51, .01**
SECURE:				
- Yes (n=21) mean (s.d.)	9.05 (3.56)	13.57 (3.83)	11.38 (4.09)	17.86 (3.65)
- No (n=47) mean (s.d.)	11.11 (4.94)	11.64 (3.92)	11.70 (4.20)	16.06 (3.60)
- F(1,66), p	2.95, .09	3.58, .06	.08, .77	3.57, .06
DISMISSING:				
- Yes (n=35) mean (s.d.)	11.00 (5.09)	10.77 (3.20)	11.14 (3.94)	15.54 (3.42)
- No (n=33) mean (s.d.)	9.91 (4.10)	13.79 (4.15)	12.09 (4.35)	17.76 (3.42)
- F(1,66), p	.94, .34	**11.33, .001**	.89, .35	**6.65, .01**
PREOCCUPIED:				
- Yes (n=8) mean (s.d.)	12.63 (3.96)	13.75 (4.74)	15.63 (3.66)	17.12 (2.90)
- No (n=60) mean (s.d.)	10.18 (4.67)	12.03 (3.85)	11.07 (3.92)	16.55 (3.79)
- F(1,66), p	1.99, .16	1.33, .25	**9.66, .003**	.17, .68

TABLE 2: DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE TO DATE

VARIABLE	CATEGORY	FREQUENCY	PERCENT	MEAN	STANDARD DEVIATION
Age	15	8	7.4		
	16	23	21.3		
	17	60	55.6		
	18	17	15.7		
	Total	108	100	16.8	.79
Ethnicity	Afro-American	71	65.7		
	Caucasian	31	28.7		
	Native American	1	.9		
	Other	5	4.6		
	Total	108	100	2.46	.96

TABLE 3: PRELIMINARY REGRESSION ANALYSIS OF AAQ SCALES ON HOSTILE ATTRIBUTIONS AND COMPETENCE SCORES

A. Regression on Hostile Attributions Score

AAQ Scale	B	SE B	β	(R^2=.136, F(4,100)=3.945, p=.0051)
Angry Distress	.114	.074	.178	
Unavailability	.109	.070	.177	
Lack of Secure Base	-.153	.063	-.243	
Role Reversal	.168	.064	.270	

B. Regression on Competence Score

AAQ Scale	B	SE B	β	(R^2=.069, F(4,100)=1.86, p=.124)
Angry Distress	-.080	.112	-.086	
Unavailability	.034	.107	.037	
Lack of Secure Base	.004	.097	.004	
Role Reversal	-.245	.098	-.268	